History of the Department of Horticulture and Forestry

The Ohio State University (1881 - 1969)

The Department of Horticulture, which began in January 1881 merely as a "Committee of Horticulture and Botany" in the School of Agriculture, presently consists of four divisions: Pomology, Vegetable Crops, Floriculture and Landscape Horticulture, together with Processing and Technology. The present staff numbers 27 with each division having its own head who is in turn responsible to the department chairman who coordinates the operation of the department as a whole.

This first "Committee" was originally headed briefly by Mr. A.P. Morgan and then became the responsibility of Professor William R. Lazenby. Professor Lazenby graduated from Cornell University in 1874 with the degree of Bachelor of Agriculture. He was one of the founders of the Ohio Agricultural Experiment Station (now the Ohio Agricultural Research and Development Center) and its first Director. He was also secretary of the College of Agriculture from 1896 to 1906. In 1881 he came to The Ohio State University as Professor of Botany and Horticulture. In 1891 when Botany became a separate department, Horticulture which was then joined with Forestry, was ably headed by Professor Lazenby who continued in this position until 1908 at which time he became Chairman of the new and separate Department of Forestry. He remained at this post until his death in 1916 at which time he had achieved the second longest record in point of service of any staff member of The Ohio State University. He was not only versatile and extremely capable, but attained prominence throughout the country as well as in Ohio Horticulture.

The four year course in Forestry was discontinued following the death of Professor Lazenby after which this area became an integral part of the Department of Horticulture, thereafter called Horticulture and Forestry. At that time Forestry was confined to courses taught during the freshman and sophomore years with E.G. Wiesehugel who took his B. S. F. at the University of Michigan in 1922 becoming responsible in 1931 for the new two-year course. Students wishing to major in Forestry found it necessary to register in four-year and five-year Forestry schools in other states. In 1942 the two year program was abandoned and Dr. Oliver Diller (Ph.D. Botany, OSU, 1934) later head of the Department of Forestry, Ohio Agricultural Experiment Station was appointed to teach non-professional courses in Forestry for one quarter. After completion of his graduate work Dr. Diller returned in 1954 to full time duty at the Ohio Agricultural Experiment Station. During the period from 1954 to 1958 several individuals came from that institution to teach for one quarter at the University.

With the employment of Professor William F. Cowen, Jr. (M. F., Yale University) in 1959 as an Extension Specialist and Robert Touse (M. S., Michigan State) in 1962 as Extension Specialist and teacher of new professional courses in Forestry, the number of students registered in this field again increased appreciably. In 1965 the curriculum was modified in order to emphasize wood technology. Furthermore, in 1968 an agreement was reached with Michigan State University whereby The Ohio State University would pay the out-of-state fee for students transferring from the two year course at The Ohio State University in order to complete their forestry training at that institution. In 1968 the decision was made to develop a separate department of forestry and this arrangement became effective on July 1, 1969.

In 1909 Professor Wendell Paddock who had received a B. S. degree in

1893 and a M. S. degree in 1898 from Michigan State College (now Michigan State University) was brought to Columbus from Colorado State College to head the Department of Horticulture which, following Professor Lazenby's death, was, as previously noted, combined with Forestry.

Professor Paddock's special contribution to the history of the department was a keen personal interest in the students who majored in horticulture during the 20 year period in which he served as department head. His interest and concern never seemed to terminate with the graduation of his students but continued by means of correspondence and personal reunion meetings.

He was a memorable professor and many of his students proved to be memorable as well. One of the outstanding classes of this period was that of 1916. Those who are still living are honored throughout the state as the "elder statesmen" of the profession. Among these is Willard Ellenwood who was a long-time member of the State Board of Agriculture and a prominent orchardist in Jackson County. Harry Lutz, owner of one of the largest and most competently operated orchards in Ohio, is still living, still prominent in horticultural circles, in Fairfield County. Other memorable names are: Howard M. Scarff, one time orchardist and long-time nurseryman in Clark County, Isaac P. Lewis, formerly a staff member at the Ohio Agricultural Experiment Station, treasurer of the Ohio State Horticultural Society and a very prominent grower in Columbiana County until his death in 1969, Clarence Dutton, former operator of the Ohio Orchard Company at Milford Center in Union County, a leader in the fruit industry, representing Ohio in Federal and State growers organizations.

Prior to 1915 horticulture was taught in a small and rather dingy building formerly occupied by the staff of the Ohio Agricultural Experiment

Station. A new stone building was planned in 1913 and dedicated on February 5, 1915. Greenhouses and other essential facilities including increased space were added.

Records available for 1910 show that durinq the first semester of that year, 168 students were enrolled in horticulture and 57 in forestry. In 1911, registration showed an increase of 10 in each field.

A close and helpful student-faculty relationship has always been one of the objectives of the department, an objective which was much easier to attain in the days of a smaller, less complex unit. The first evidence of this relationship is to be found in the organization on November 15, 1896 of a student-faculty club with the casual and rather amusing title of "The Asparagus Club". The discussions, however, either weekly or every other week, were serious considerations of such horticultural subjects as "Bees and Horticulture", "Greenhouse Construction", "Grape Blight"; also on one occasion "Ghost Stories by the members". Those in attendance signed up in a hard covered black notebook still available, with Professor Lazenby usually heading the list and the rest signing in after him.

One of the most interesting things about the Asparagus Club is that its roster includes many names of men who later attained considerable prominence in the horticultural field. Among these was William R. Beattie, who later became Principal Horticulturist of the United States Department of Agriculture. He was also an uncle of Dr. James M. Beattie, presently Associate director of the Ohio Agricultural Research and Development Center. John Cunningham and Homer Price who later became deans of the College of Agriculture began their careers in the Asparagus Club, as did Homer C. Thompson, the 1908 secretary of the club, who for many years headed the Department of Vegetable Crops at Cornell University, Dr. Joseph H. Gourley,

a 1906 member, became chairman of the department. Vernon Davis, an assistant professor in the department, was also one of the members of this illustrious group, many of which held prominent positions in the Federal and State services as well as in the horticultural industries. On January 25, 1904, the organization took on the more formal title of the Horticulture Club, changing in 1907 to the Horticulture and Forestry Club and finally becoming the Student Horticultural Society which continues to the present. In floriculture and ornamental horticulture the Trowel and Spade Club, later the Floriculture Forum, as well as the Food Technology Club which was organized in 1949 by the processing division have been very active and successful in their special areas. Such organizations have helped to achieve the closer faculty-student relationship which has been one of the continuing objectives of the department.

In 1921 Professor Joseph Harvey Gourley who graduated from The Ohio State University in 1908 and became head of the Department of Horticulture, first at the University of New Hampshire and later at the University of West Virginia, now returned to Ohio as chief of the Department of Horticulture at the Ohio Agricultural Experiment Station at Wooster. In 1929 Professor Gourley was asked to take over and coordinate the chairmanship of the Department of Horticulture and Forestry at Columbus and the Experiment Station department at Wooster, Ohio. This constituted one of the most significant developments in the history of the department. The new relationship of the two departments implemented mutual benefits. The curriculum was greatly improved both in the number and variety of the courses, and in the depth and range of instruction offered to both undergraduate and graduate students. At Wooster the contact with instructional activities at Ohio State was stimulating and frequently offered opportunities for graduate students to work on their research problems at what was then known as the

Experiment Station.

At Columbus, Dr. Gourley (Ph.D., University of Chicago, 1931) immediately set about making significant additions to the teaching staff. Professor Alex Laurie was brought from Michigan State University to become responsible for instruction in Floriculture and to head the division of Floriculture and Ornamental Horticulture. Professor Laurie had obtained a B. S. degree from Cornell University and a M. S. degree from Washington University (St. Louis) and had built an excellent reputation for his knowledge of florist's crops at Michigan State. Professor Laurie's work on photoperiodism in the chrysanthemum is one example of his successful research program. Present non-seasonal chrysanthemum production is due almost wholly to his method of bringing the plants into bloom as required by shortening or lengthening the exposure to light and by regulation of temperature.

Dr. Howard D. Brown came to head the work in Vegetable Crops from Purdue where he had established himself as an enthusiastic worker and Dr. Lewis C. Chadwick who had just received his Ph.D. from Cornell University came to take over instruction and extension in ornamentals.

Dr. Chadwick became known as one of the country's outstanding authorities in ornamental plants and his "Nursery Notes" later became known throughout the world. Dr. Freeman S. Howlett, also with a Cornell doctorate in 1925 and then serving on the Pomology staff at Wooster came to Columbus for the first time in the Autumn quarter of 1929 to undertake teaching in Pomology together with a course involving the nitrogen and mineral nutrition of horticultural crops.

Three extremely competent members of the Extension staff had been added previously by Professor Paddock and continued to serve with distinction under Dr. Gourley. These were Professor Frank Beach in the Fruit Crops

area and Professor Earl Tussing for Vegetable Crops with major emphasis on potatoes. Largely through Professor Tussing's efforts the potato industry was reinvigorated and continues as an important segment of the vegetable crops industry. Professor Victor Ries was brought from Purdue University in 1926 to take over extension activities with amateur floriculture, an area which is still experiencing a general upsurge of interest. Professor Ries is unexcelled in his knowledge of annuals, perennial and ornamental shrubs. His popular and informative columns on gardens and gardening still continue as an important addition to the field.

The additions to the teaching personnel, the improved and enlarged curriculum together with the nationally recognized competence of the staff resulted in an outstanding increase in both undergraduate and graduate enrollment. A large number of undergraduate students came from out-of-state to take work in floriculture and ornamental horticulture since departments in these areas were less well developed in most other states. The graduate program in all divisions attracted many out-of-state as well as foreign students. In fact at one time there were more foreign graduate students registered in the Department of Horticulture than in any other department of the College. The notable number of students working toward the Ph.D. degree was due in some part also to the fact that a doctorate in Horticulture was offered only in a limited number of institutions in this country. Naturally the enrollment was greatly reduced during World War II but the returning G.I.'s and the G.I. Bill of Rights encouraging education, a new group of serious and competent students again swelled the horticultural ranks.

In the midst of this accelerated development, Dr. Gourley's death on October 27, 1946 came as a great personal and professional loss to the

department and to the College of Agriculture. He had been teaching a valuable course dealing with the anatomy and morphology of horticultural species, a course which was of real commercial as well as academic significance. In addition he was advising a rather considerable number of graduate students. His endless enthusiasm for his chosen field and his ability to inspire his students with the excitement of the known and the unknown, the yet to be tested and verified was an irreplaceable contribution.

Following the death of Dr. Gourley, Dr. Freeman S. Howlett became acting chairman of the Department of Horticulture and Forestry at Columbus and in 1947 of the departments at both Wooster and Columbus.

Dr. Howlett had taken his B. S. and Ph.D. degrees at Cornell University. In 1932 he was awarded a Rockefeller Fellowship (National Research Council) for advanced study abroad, an opportunity which began his lifelong interest in international Horticulture. He spent a year at the John Innes Horticultural Institution in London, England where he made a special study of the effect of carbohydrate deficiency upon microsporogenesis of the tomato.

As chairman of the two departments he continued the divisional organization instituted by Dr. Gourley and as time went on placed increased emphasis on this set-up, feeling that a division of administrative responsibility was not only efficient but that it allowed for greater specialization and autonomy in each of the four divisions while at the same time benefitting by the coordinating effects of the department as a whole. In fact, in response to the increasing dietary importance of fruits and vegetables it soon became apparent that the formation of another division was advisable.

Consequently Dr. Howard D. Brown was requested to assume leadership of the processing area and the new division was known as "Horticultural

Products". At first the number of students interested in freezing, canning and dehydration as well as the preparation of specialty products was small but the number majoring in this field has increased steadily until it is now one of the most popular divisions in the department.

With the retirement of Dr. Brown in June 1957, Dr. Wilbur A. Gould, who obtained his undergraduate degreee at the University of New Hampshire, his M.S. and Ph.D. degrees at Ohio State, was made head of this division which came to be known as Processing and Technology. Dr. Jean R. Geisman (Ph.D., OSU) has become responsible for radioactive research and instruction and has taken a leading role in teaching a plant science course both at the branch schools (Lima and Mansfield) and the College of Agriculture and Home Economics at Columbus. Dr. David E. Crean (Ph.D., OSU), the most recent addition to this division, is particularly concerned with the biochemical aspects of the processing of fruits and vegetables. The Processing and Technology Division (Food Technology) has attracted an increasing number of students both national and foreign until in autumn quarter of 1969 there were 55 undergraduate majors and 17 graduate students.

Following the transfer of Dr. Brown to Processing, Dr. Francis Johnstone, Jr. became head of Vegetable Crops in July 1948, with Dr. Kenneth Alban (B.S., Dennison; Ph.D., OSU) as a valued member of the teaching staff. Dr. Alban's work on weed control has received national recognition.

At the time of Dr. Gourley's sudden death, Fred Hartman (B.S., University of Toledo; Ph.D., OSU), at that time a graduate assistant in the department, took over Dr. Gourley's morphology course. He has continued the teaching of this course which is of basic importance, in addition to Pomology instruction.

Other changes followed with Dr. Johnstone resigning to become head of the department at the University of Georgia. On July 11, 1952, he was

succeeded by Dr. Walter N. Brown who took his advanced degree at the University of Illinois. In addition to his teaching, Dr. Brown became well known for his breeding of the greenhouse tomato and for the evaluation of vegetable cultivars. His sudden death in July 1969 leaves the staff with a deeply regretted vacancy.

Following the retirement of Dr. Chadwick, the division of Floriculture and Ornamental Horticulture found itself most fortunate in two outstanding staff members who have made a name not only for themselves but for the division which they so ably served. Dr. Donald Kiplinger (B. S., Iowa State; Ph.D., OSU) has become one of the most notable professional floriculturists and with Professor Laurie, authored the most widely used textbooks on commercial floriculture. Dr. Kenneth W. Reisch (B. S., University of Connecticut; Ph.D., OSU) became responsible as well as highly respected for his teaching and research in what is now termed Landscape Horticulture. Dr. Philip Kozel (Ph.D., Cornell) became a staff member in Landscape Horticulture in 1958.

Equally noteworthy in the area of Vegetable Extension is Eugene Wittmeyer (B.S., OSU) who joined the staff in 1950 and has made himself indispensable to the Ohio growers. The capable Extension staff includes Harry K. Tayama, Eldon Banta, James L. Caldwell, James D. Utzinger, William Brooks, Andrew C. Peng and Elton M. Smith.

In a number of cases, members of the Wooster staff came to Columbus to serve as instructors for one quarter only, an arrangement which contributed materially to the increasingly close relationship between the two institutions. One of these was Donald Comin who specialized in research and instruction in storage and post-harvest physiology. He died in a motor accident in 1962 and was succeeded by Dr. Dale Kretchman (B.S.,

Ph.D., Michigan State) who took over instruction in the same field in 1962. Dr. Robert O. Miller (Ph.D., Cornell) came from Wooster for one quarter for several years to teach floriculture. Dr. Theodore C. McDowell (Ph.D., OSU) replaced Dr. Miller in 1968 for one quarter teaching. Dr. Robert G. Hill, Jr. (B. S., Ph.D., University of Maryland) also came from the Ohio Agricultural Experiment Station in 1951 to teach pomology for one quarter and continued in this capacity until July 1969. This relationship between the department at Wooster and horticulture at The Ohio State University has always been a very valuable arrangement both for the institutions involved and the individuals concerned with this responsibility.

And so from the first "Committee" in 1891 the staff has grown to a total of 21 members located on campus for at least one quarter. There are also 6 staff members at the Ohio Agricultural Research and Development Center who hold nominal appointments to the OSU staff. The undergraduate students in the autumn quarter of 1969 numbers 160 while the graduate enrollment stands at 32.

There are more student increases in Processing and Technology, in Floriculture and in Landscape Horticulture than in the more traditional production areas such as Pomology and Vegetable Crops. This development is due in part to the shift from rural to urban living especially in Ohio which is one of the major industrial areas in the country. The department has made a real effort to meet and adjust to the rapidly increasing social changes, first by keeping in close touch with agri-business and with all the horticultural industries which depend on our department for trained personnel, as well as for research and assistance with their particular production problems.

In order to achieve this objective the helpful relationship between

industry and the department was formalized in December 1951 with the formation of the Horticultural Council. Two members are now appointed by each of the allied industrial organizations as well as from the two state garden clubs. Twelve organizations now compose the Council. The primary functions of the Council are: 1) Advisory with respect to educational and research objectives; 2) Recruitment of students; 3) Support for departmental improvement in facilities such as the physical plant or additional staff. By way of illustration, the Council has been of tremendous value in obtaining the allotment of funds for the new Horticulture, Forestry and Food Technology Center which has been anticipated for forty years, begun in 1967 and completed in the Autumn of 1969.

Another means of relating the department to the modern requirements is the setting up of various continuing education short courses, conferences and "schools" for the purpose of constantly updating and enlarging information in the various areas involved. Of these, the first was the Ohio State Fruit School which had its first session in 1929. In recent years, the short courses in florist's crops and in ornamentals have each enrolled as many as 800 to 1000 individuals for the three day sessions. For several years short courses were held for greenhouse vegetable growers and operators. Among the other courses held annually or bi-annually are those for potato and sweet corn producers. In the processing and technology division the Annual Tomato Processor - Quality Control Short Course, Canners, Fieldman, Food Processor and Allied Industry Short Course and the Ohio Bakers Association Short Course have been very valuable continuing education features.

From the student angle we have attempted to align the department with changing needs, first of all by a complete revision of the curriculum in 1965-66. The courses were upgraded with the intention of providing a more

basic scientific approach to the problems involved while at the same time providing greater opportunity for independent study under faculty direction.

Graduate courses also were revised to encourage a more detailed study of specific physiological and chemical problems. Tremendous advances in the design and manufacture of scientific equipment have made possible a more precise approach to a problem. One example is the use of the spectograph for the analysis of plant material in order to determine the precise level of nutrient elements, not in the soil but in the plant itself.

Also student-oriented are the emphasis on career conferences and the availability of materials helpful to prospective students. In 1961, a well-illustrated brochure entitled "Career Opportunities in Horticulture" was published with funds supplied for the purpose by members of the Horticultural Council. This brochure has been widely distributed nationally as well as within the state. It has been in great demand by guidance counsellors and other placement specialists.

Another factor pertinent to student assistance is the Helena Chamberlain Fellowship established January 5, 1948 by the bequest from Mr. Ellis Lovejoy, the husband of a most enthusiastic and promising student of Professor Paddock's, who graduated from the department in the class of 1914. He left the sum of $127,000 as a memorial to his wife Helena Chamberlain. The fund went to the University Endowment Fund, the interest to be allotted to the Department of Horticulture. Since this fund has been consistently used for the assistance of outstanding graduate students more than 35 have received UP to $3000 annually from this fund. The department is most grateful for this gift which in many cases has provided crucial assistance.

Another important bequest is that of the Overlook Farm located 1n Fairfield County near Lancaster. The farm comprising of 52 acres includes

both fruit plantings as well as a forested area. It was deeded to the College of Agriculture and Home Economics in 1964. This, together with the purchase of 69 adjacent acres provides considerable additional space for experimental plantings for use in graduate and undergraduate instruction and research. Apple and peach plantings are already established and plans for space devoted to ornamentals are in the process of completion.

Another particularly interesting development has been the establishment of the educational assistance program in India. In accordance with university policy the Department of Horticulture has cooperated in the U. S. A. I. D. program developed with the help of Ohio State in the Punjab Agricultural University at Ludhiana and the University of Udaipur in Rajasthan. In February and March of 1967 Dr. Howlett went to Ludihiana as consultant to the Horticulture Department where he made a complete survey of research work and curricula as well as the organization of the department. The Horticulture Department is also responsible for a leaf analysis program for the purpose of ascertaining the nutrient element status of fruits and vegetables in these two Indian states. Dr. Garth Cahoon is presently assisting in the implementation of this program which presumably will cover at least a two year period.

But the most tangible evidence of departmental growth and certainly one of the most important developments in the history of the department is the completion and dedication on October 30, 1969 of the new Horticulture, Forestry and Food Technology Center. It is without a doubt one of the most complete and modern facilities for horticultural instruction in the country. The overall space comprises 62,500 square feet. There are two greenhouses with 21,300 square feet each, an efficient and spacious headhouse as well as numerous small specialized greenhouses. There are three classrooms designed for complete flexibility adjusting to larger

or smaller groups. There are 12 classroom-laboratories for undergraduate and graduate instruction as well as 10 small laboratories for graduate student and faculty research. The floor space includes well planned offices for staff and graduate students. The processing aspects include a very modern pilot plant associated with the appropriate laboratories for the analysis of the processed product. Dr. Wilbur Gould and Dr. Donald Kiplinger, who worked closely with the university architect, deserves special credit for the detailed planning of this building. It is hoped that this new facility will help to provide instruction for undergraduate and graduate students commensurate with the development and needs of the horticultural productions and food technology industries. The laboratories and greenhouse are of the most advanced design and the modern equipment permits likewise the attainment of new basic information of a biological nature. Such information will be of outstanding significance to the various areas of horticulture and to the processing of horticultural products.

But the most elaborate, the most efficient building is only as effective as the staff that works there, as vital as the students who come there in the hope of shaping their lives to a demanding and a rewarding career. And so in the end the history of the department is always written in the efforts and successes of the men who have served it, in the fulfilled lives of its students, in the developments which, because of a common effort, productively alter the lives of men everywhere. The history of the Horticulture Department will continue to be written in the lives of Horticulturists.